

Collection 5 Change Summary MODIS Active Fire Algorithm and Products

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Level 2 Fire Product (MOD14/MYD14)

- Changed calculation of fire radiative power (FRP) to produce more useful output; users no longer need to multiply FRP by pixel area.
- Changed long name of SDS "FP_power".
- Changed calculation of detection confidence to more accurately identify questionable fire pixels.

Level 2G Fire Products (MOD14GD/MOD14GN/MYD14GD/MYD14GN)

- New SDSs to support production of Collection 5 Level 3 fire products.

Level 3 Fire Products (MOD14A1/MYD14A1 and MOD14A2/MYD14A2)

- Code now writes product files using internal HDF compression to shrink them to ~5% of their uncompressed size.
- Added two new SDSs to daily fire product ("MaxFRP" and "sample").
- SDS name changed from the unwieldy "most confident detected fire" to "FireMask".
- Reduced 32-bit Collection 4 QA layer to simpler 8-bit layer.
- Added global HDF attributes to simplify use of tile-level QA.
- As always, the daily Level 3 fire products contain 8 days of data per product file for convenience. For Collection 5, product specific metadata is now written for individual days, rather than as totals for the entire 8-day product period.
- Complete rewrite of pre-launch production code to render it comprehensible and maintainable.